While particular embodiments of the present invention have been described and illustrated, it should be understood that the invention is not limited thereto since modifications may be made by persons skilled in the art. The present application contemplates any and all modifications that fall within the spirit and scope of the underlying invention described and claimed herein.

What is claimed is:

1. A TAG-VLAN system capable of sending tag frames, comprising:

a switch for sending a packet including VLAN IDs managed by the switch; and

a terminal for storing the VLAN IDs of the packet sent by the switch, distinguishing when the VLAN ID is the VLAN ID that the terminal itself belongs to and performing setting relating to its own VLAN.

2. The TAG-VLAN system of claim 1, wherein, when there is a plurality of VLAN IDs for the packet sent by the switch, the terminal sends the packet to the switch, and a test is performed to determine whether or not the terminal can use the VLAN ID for itself.

3. A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

a switch sending a GVRP packet message including VLAN IDs that the switch itself manages;

a terminal storing VLAN IDs managed by the switch by monitoring GVRP packet messages sent by the switch, and describing the VLAN IDs and its own Gateway Address in confirmation frames constituted by tag frames for sending to the switch;

the switch sending a response frame to the terminal in response to the confirmation frame

when a pair consisting of the VLAN ID managed by the switch itself and an Internet Protocol Address for the VLAN ID and a pair of the VLAN ID described in the confirmation frame and the Gateway Address sent by the terminal match; and

the terminal determining whether the VLAN ID described in the confirmation frame is a VLAN ID which it can assign to itself, by receiving response frames sent by the switch in response to confirmation frames.

4. The method of claim 3, wherein, with regards to the sending of a response frame to the terminal in response to the confirmation frame, when it is determined that processing is possible for a matching VLAN ID based on tag information described in the confirmation frame sent by the terminal, a response frame is sent back to the terminal in response to the confirmation frame.

5. The method of claim 4, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs, makes a confirmation frame, and sends the confirmation frame to the switch, so that when no response frame from the switch is received within a preset time, a VLAN ID other than the selected VLAN ID is selected, a new confirmation frame is made, and the confirmation frame is sent to the server.

6. The method of claim 4, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for sending to the switch, with a VLAN ID described in a corresponding confirmation frame being described at the

response frame from the switch.

7. A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

a switch sending a GVRP packet message including VLAN IDs that the switch itself manages;

a terminal monitoring GVRP packet messages sent by the switch so as to store VLAN IDs managed by the switch, and describing the VLAN ID in a request frame for sending to a server;

the switch sending the request frame sent by the terminal to the server when the VLAN ID described in the request frame sent by the terminal and the VLAN ID to which the server belongs match;

the server sending a response frame to the terminal in response to the request frame switched by the switch; and

the terminal determining whether the VLAN ID described in the confirmation frame is a VLAN ID which it can assign to itself, by receiving response frames sent by the server in response to request frames.

8. The method of claim 7, wherein the server sends a response frame to the terminal in response to the request frame switched by the switch, address information preset at the server is included in the response frame for the request frame, and the terminal sets its own address information based on the address information included in the response frame for the request frame.

9. The method of claim 8, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs, makes a request frame, and sends the request frame to the server so that when no response frame from the server is received within a preset time, a VLAN ID other than the selected VLAN ID is selected, a new request frame is made, and the request frame is sent to the server.

10. The method of claim 8, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for sending to the server, with a VLAN ID described in a corresponding confirmation frame being described at the response frame from the server.